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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,375	07/09/2003	Eiichi Komai	9281-4601	4922
7590 08/10/2004				
Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610			EXAMINER JONES, STEPHEN E	
			ART UNIT 2817	PAPER NUMBER

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/618,375	Applicant(s) KOMAI ET AL.	
	Examiner Stephen E. Jones	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/9/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities:

It appears that the phrase "wherein the line conductors intersect on a second main surface of the magnetic plate and are connected to one another on the first main surface of the magnetic plate" should read as --wherein the line conductors intersect on a first main surface of the magnetic plate and are connected to one another on the second main surface of the magnetic plate-- since the conductors are disposed on the top (i.e. the first surface as is claimed) and they also intersect on the top surface, but are connected together on the bottom surface (i.e. the second surface).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Misawa et al. (JP 2001044710A) in view of Hempel et al.

Misawa teaches a nonreciprocal device including: a yoke (11, 22); a ferromagnetic plate (17) shaped as a circle having a straight cut side (e.g. see Fig. 2) (i.e. it has a major and minor axis and a convex surface on one peripheral portion; conductors are wrapped around the ferrite and are inherently insulated from each other for the device to function properly; each conductor has a terminal; capacitor chips are connected to the conductors; a magnet (21) provides a DC bias; and the magnet projection covers the projection of the ferrite (Claim 5).

However, Misawa does not teach that the magnet is the same shape as the ferromagnetic plate (Claims 1 and 2); that the magnet is shaped as a racing track (Claim 4), or that the ratio of the axis of the magnet to ferrite (either minor or major) is in the range from 1 to 1.9 (Claim 6).

Hempel provides the general teaching of forming the magnet as the same shape and similar size as the ferrite (e.g. see Fig. 1).

It would have been considered obvious to one of ordinary skill in the art to have modified the Misawa device such that the magnet is the same shape as the ferrite (such as taught by Hempel), because it would have provided the advantageous benefit of reducing the weight of the device by using less magnet material since the magnet would

have less excessive magnet material past the edges of the ferrite, thereby suggesting the obviousness of such a modification. Also, the magnet of the combination of Misawa and Hempel can be considered in a "racing track" shape since such a description is broad and racing tracks can have many different configurations.

Furthermore, it would have been considered obvious to one of ordinary skill in the art to have the ratio of the axis of the magnet to ferrite (either minor or major) in the range from 1 to 1.9 in the combination of Misawa and Hempel, especially since both Misawa and Hempel show that the magnet is only slightly greater in distance across its surface than the ferrite, and also having the magnet only slightly larger (i.e. at a ratio of close to one) would have provided the advantageous benefit of a minimized size thus providing the advantageous benefit of reducing the weight of the device.


Allowable Subject Matter

5. Claims 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Stephen Jones
Patent Examiner
Art Unit 2817

SEJ